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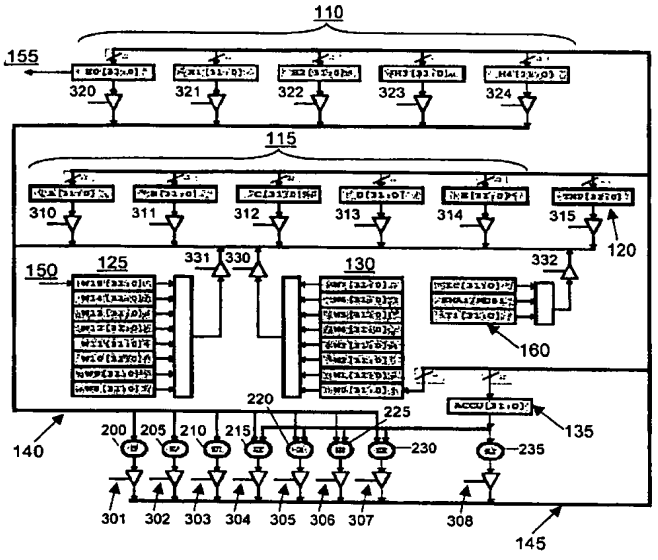
(54) Title: APPARATUS TO IMPLEMENT DUAL HASH ALGORITHM



(57) Abstract: Apparatus is disclosed which is arranged to accept digital data as an input, and to process said data according to one of either the Secure Hash Algorithm (SHA-1) or Message Digest (MD5) algorithm to produce a fixed length output word. The apparatus includes a pluraity of rotational registers for storing data, one of the registers being arranged to receive the input data, and data stores for initialisation of some of said plurality of registers according to whether the SHA-1 or MD5 algorithm is used. The data stores include fixed data relating to SHA-1 and MD5 operation. Also included is a plurality of dedicated combinatorial logic circuits arranged to perform logic operations on data stored in selected ones of said plurality of registers.

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